

IN THE CLAIMS:

Claims 1-15 (canceled).

16. (Currently Amended) A device ~~for sealing to at least partially seal~~ a leveler door opening of a coke oven chamber during top charging of the coking coal; comprising a housing having a first end opening connectable to the leveler door opening, ~~said door opening at least partially defined by a cross-sectional area of said coke oven chamber~~, a leveler bar guidable in into a second end opening and at least partially through an interior passageway of said housing and at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to at least partially ~~seal said cross-sectional area of said leveler door opening~~, inhibit a flow of gases from the coke oven through the leveler door opening and into said housing, said sealing mechanism including a regulatable exhaust fan connected to said housing to expel gas through an outlet opening in said housing and a flow measuring mechanism at least partially positioned in said housing between the coke oven and said outlet opening, said outlet opening positioned between said first and second end openings of said housing, said flow measuring mechanism at least partially controlling said regulatable exhaust fan to control a volume of gas expelled through said outlet opening.

Claim 17 (Canceled).

18. (Currently Amended) The device of claim 16, wherein said leveler bar includes at least two of said cross segments and said housing having at least two sealing plates arranged within secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented to seal said leveler bar from above and below over an area between said two cross segments when said leveler bar passes between said two sealing

~~plates and including a sealing mechanism to at least partially seal said side segments of said leveler bar adjacent said leveler door opening.~~

19. (Currently Amended) The device of claim 18, wherein said two sealing plates includes a sealing arrangement to at least partially seal said side segments of said leveler bar, said sealing arrangement includes sealing strips and ~~said~~ sealing plates ~~and are~~ provided with press-on means.

20. (Currently Amended) The device of claim ~~18~~ 19, wherein said sealing plates are held in said housing by a partial vacuum, said partial vacuum pressing said sealing plates against said leveler bar.

21. (Currently Amended) The device of claim ~~18~~ 19, wherein said sealing plates are beveled.

22. (Currently Amended) The device of claim ~~18~~ 19, including a plurality of said sealing plates and a plurality of sealing strips being arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

23. (Currently Amended) The device of claim ~~18~~ 19, wherein said housing at least partially surrounds said sealing plates and said side segments of said leveler bar.

24. (Currently Amended) A device ~~for sealing~~ to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal comprising a housing having a first end opening connectable to the leveler door opening so as to form a seal, ~~said door opening defined by a cross-sectional area of said coke oven chamber,~~ a leveler bar guided into a second end opening and at least partially through an interior passageway of said housing and at least partially through said leveler door opening, said leveler bar including at least two side segments and at least ~~one two~~ cross ~~segment~~ segments connecting said two side segments, said housing provided with a

sealing mechanism to at least partially ~~seal said cross-sectional area of said leveler door opening~~
inhibit a flow of gases from the coke oven through the leveler door opening and into said housing,
10 said sealing mechanism including and at least one movable sealing element to at least partially seal
an inner cross section of said leveler bar between said side segments, said at least one movable
sealing element includes at least one ~~rotary lock~~ pivoting seal having a pivotable panel wherein the
pivotable panel is movable between at least two of said cross segments of said leveler bar, at least
one cell wheel having a plurality of panels rotatable about an axis wherein at least one of said panels
15 is movable between at least two of said cross segments of said leveler bar, ~~at least one movable roller~~
and combinations thereof.

Claims 25 and 26 (Canceled).

27. (Currently Amended) The device of claim 26, including at least ~~one~~ two sealing plate
being plates arranged in said housing, said sealing plates secured to said housing and extending
outwardly from said second end opening of said housing, said sealing plates at least partially sealing
gas between at least two of said cross segments of said leveler bar that are spaced outwardly from
said second end opening, said two sealing plates positioned substantially parallel to one another and
oriented above and below said two cross segments when said leveler bar passes between said two
sealing plates.

Claim 28 (Canceled).

29. (Currently Amended) A method for sealing a leveler door opening of a coke oven
chamber during ~~the~~ a leveling process; including providing a housing about the leveler door opening
and guiding a leveler bar ~~therethrough~~ at least partially through said housing and said leveler door
opening, forming a seal between said leveler door opening and said leveler ~~bar and exhausting a gas~~
5 ~~from said housing,~~ the improvement comprising regulating ~~said gas~~ exhaustion of gas from said
housing by measuring the flow of gas in the area of through the leveler door opening and controlling

the rate of said gas exhaustion from said housing in order that there is effectively no gas flow at the measuring location through said leveler door opening.

30. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal; comprising a housing having a first end opening at least partially connectable to the leveler door opening and at least partially encircling said the leveler door opening, ~~said door opening at least partially defined by a cross-sectional area of said coke oven chamber~~; a leveler bar at least partially moveable in into a second end opening of said housing and at least partially through an interior passageway of said housing and guidable in at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to ~~at least partially prevent gas from escaping between said housing and said leveler door opening~~; inhibit a flow of gases from the coke oven through the leveler door opening, said sealing mechanism including a regulatable exhaust fan connected to said housing to expel gas through an outlet opening in said housing and a flow measuring mechanism at least partially positioned in said housing between the coke oven and said outlet opening, said outlet opening positioned between said first and second end openings of said housing, said flow measuring mechanism measuring gas flow primarily entering said housing from said coke oven chamber through said leveler door opening, said flow measuring mechanism at least partially controlling said regulatable exhaust fan to control a flowrate a gas from said housing through said outlet opening so as to substantially reduce the flow of gas from said coke oven chamber into said housing through said leveler door opening.

Claims 31 and 32 (Canceled).

33. (Currently Amended) The device as defined in ~~31~~ 30, wherein said regulatable exhaust fan at least partially directs gas into an adjacent coke oven chamber.

34. (Currently Amended) The device as defined in claim 30, wherein said leveler bar includes at least two of said cross segments and said housing having ~~at least~~ two sealing plates

5 ~~arranged within~~ secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented to seal said leveler bar from above and below over an area between said two cross segments when said leveler bar passes between said two sealing plates and including a sealing mechanism to at least partially seal said side segments of said leveler bar adjacent said leveler door opening.

5 35. (Currently Amended) The device as defined in claim 33, wherein said leveler bar includes at least two of said cross segments and said housing having at least two sealing plates arranged within secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented to seal said leveler bar from above and below over an area between said two cross segments when said leveler bar passes between said two sealing plates and including a sealing mechanism to at least partially seal said side segments of said leveler bar adjacent said leveler door opening.

36. (Currently Amended) The device as defined in claim 30, including a seal mechanism arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

37. (Currently Amended) The device as defined in claim 35, including a seal mechanism arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

38. (Previously Presented) The device as defined in claim 36, wherein said leveler seal is provided with press-on means.

39. (Previously Presented) The device as defined in claim 37, wherein said leveler seal is provided with press-on means.

40. (Previously Presented) The device as defined in claim 36, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

41. (Previously Presented) The device as defined in claim 39, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

42. (Previously Presented) The device as defined in claim 36, wherein said sealing plates are at least partially beveled.

43. (Previously Presented) The device as defined in claim 41, wherein said sealing plates are at least partially beveled.

44. (Previously Presented) The device as defined in claim 36, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

45. (Currently Amended) The device as defined in claim ~~34~~ 41, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

46. (Currently Amended) A device to at least partially seal a leveler door opening of a coke oven chamber during top charging of the coking coal, comprising a housing having a first end opening at least partially connectable to the leveler door opening, ~~said door opening at least partially defined by a cross-sectional area of said coke oven chamber~~, a leveler bar at least partially moveable in into a second end opening of said housing and at least partially through an interior passageway of said housing and guidable in at least partially through said leveler door opening, said leveler bar including at least two side segments and at least one cross segment connecting said two side segments, said housing provided with a sealing mechanism to ~~at least partially prevent gas from escaping between said housing and said leveler door opening, and~~ inhibit a flow of gases from the coke oven through the leveler door opening, said sealing mechanism including at least one movable sealing element to at least partially seal an inner cross section of said leveler bar between said side segments, said at least one movable sealing element includes at least one pivoting seal, at least one cell wheel, at least one movable roller and combinations thereof.

Claim 47 (Canceled).

48. (Previously Presented) The device as defined in claim 46, including a plurality of moveable sealing elements.

Claim 49 (Canceled).

50. (Currently Amended) The device as defined in claim ~~47~~ 46, wherein said at least one ~~rotary lock~~ pivoting seal is hingably connected to said housing, said at least one rotary lock having a pivotable panel wherein the pivotable panel is movable between at least two of said cross segments of said leveler bar.

51. (Currently Amended) The device as defined in claim ~~49~~ 48, wherein said at least one ~~rotary lock~~ pivoting seal is hingably connected to said housing, said at least one rotary lock having

a pivotable panel wherein the pivotable panel is movable between at least two of said cross segments of said leveler bar.

52. (Currently Amended) The device as defined in claim 47 ~~46~~, wherein said at least one cell wheel is ~~hingably connected to said housing at a location spaced from an end of said cell wheel;~~ ~~said housing including a housing to enable at least partial rotation of said cell wheel within said housing~~ having a plurality of panels rotatable about an axis wherein at least one of said panels is movable between at least two of said cross segments of said leveler bar.

Claim 53 (Canceled).

54. (Currently Amended) The device as defined in claim 47 ~~46~~, wherein said leveler bar includes at least two of said cross segments and said housing having at least two sealing plates arranged within secured to said housing and extending outwardly from said second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented to seal said leveler bar from above and below over an area between said two cross segments when said leveler bar passes between said two sealing plates and including a sealing mechanism to at least partially seal said side segments of said leveler bar adjacent said leveler door opening.

55. (Currently Amended) The device as defined in claim 46, including a seal ~~mechanism~~ arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

56. (Currently Amended) The device as defined in claim 54, including a seal ~~mechanism~~ arrangement to at least partially form a leveler seal between an outer surface of said leveler bar and

an interior surface of said housing, said leveler seal including sealing strips, sealing plates and combinations thereof.

57. (Previously Presented) The device as defined in claim 55, wherein said leveler seal is provided with press-on means.

58. (Previously Presented) The device as defined in claim 56, wherein said leveler seal is provided with press-on means.

59. (Previously Presented) The device as defined in claim 55, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

60. (Previously Presented) The device as defined in claim 58, wherein said sealing plates are at least partially held in said housing by a partial vacuum, said partial vacuum at least partially causing said sealing plates to press against said leveler bar.

61. (Previously Presented) The device as defined in claim 55, wherein said sealing plates are at least partially beveled.

62. (Previously Presented) The device as defined in claim 60, wherein said sealing plates are at least partially beveled.

63. (Previously Presented) The device as defined in claim 55, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

64. (Previously Presented) The device as defined in claim 62, wherein a plurality of said sealing plates and a plurality of sealing strips are arranged one behind the other in an axial direction, said axial direction defining a thrust direction for said leveler bar.

65. (Currently Amended) A method for at least partially sealing a leveler door opening of a coke oven chamber during the leveling process comprising:

a. providing a housing having a first end opening at least partially connectable to the leveler door opening; ~~said door opening at least partially defined by a cross-sectional area of said coke oven chamber;~~

b. providing a leveler bar;

c. moving and at least partially guiding said leveler bar ~~in said housing~~ at least partially though said housing and said leveler door; and,

d. monitoring gas flow through said leveler door opening; and,

~~e. at least partially exhausting a gas from said housing by at least partially regulating a flow the exhausted gas based at least partially upon a measured flow of gas in an area of the leveler door opening, a rate of exhausting of gas being selected to substantially reduce gas flow at the measuring location~~ regulating exhaustion of gas from said housing by measuring a flow of gas through the leveler door opening and controlling a rate of said gas exhaustion from said housing in order that there is effectively no gas flow through said leveler door opening while said leveler bar moves through said leveler door opening.

Claim 66 (Canceled).

67. (Previously Presented) The method as defined in claim 65, wherein said leveler bar includes at least two side segments and at least one cross segment connecting said two side segments.

Claims 68-70 (Canceled).

71. (Previously Presented) The method as defined in 65, including the step of at least partially directing said exhausted gas fan into an adjacent coke oven chamber.

72. (Currently Amended) The method as defined in claim 66, wherein including a sealing arrangement to inhibit gas flow between said housing and said leveler bar, said seal arrangement includes at least two sealing plates, at least one sealing strip, and combinations thereof, ~~said seal at least partially arranged within said housing to seal said leveler bar from above and below at least a portion of said leveler bar.~~

73. (New) The method as defined in claim 65, wherein said leveler bar includes at least two of said cross segments and said at least two sealing plates being secured to said housing and extending outwardly from a second end opening of said housing, said sealing plates at least partially sealing gas between at least two of said cross segments of said leveler bar that are spaced outwardly from said second end opening, said two sealing plates positioned substantially parallel to one another and oriented above and below said two cross segments when said leveler bar passes between said two sealing plates.